



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/613,964	07/11/2000	Walter Schubert	S159 1020	1538

7590 03/26/2002

Womble Carlyle Sandridge & Rice
P O Box 720601
Atlanta, GA 30358-2601

EXAMINER

PADMANABHAN, KARTIC

ART UNIT	PAPER NUMBER
----------	--------------

1641

DATE MAILED: 03/26/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/613,964

Applicant(s)

SCHUBERT, WALTER

Examiner

Kartic Padmanabhan

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

4. The information disclosure statement filed 8/2/00 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

Art Unit: 1641

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. *The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.* The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino

Art Unit: 1641

acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Applicant must include heading for appropriate sections of the specification, as outlined above.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The recitation of "which contacts" in line 4 of claim 1 (line 6 overall) is vague and indefinite because it is unclear if "which" refers to the object holder or target structure. In addition, "used for cooling said object holder" in the last line of the claim is not given any patentable weight because it merely recites an intended use. Applicant should use functional language such as "wherein said thermostat cools..."

10. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are the ways in which the various pieces of the device are connected to each other.

11. Claim 2 is rejected as vague and indefinite for the recitation of "paraffin-like" because this language does not allow the metes and bounds of the claim to be adequately identified.

What exactly is "paraffin-like"? Is the material paraffin?

Art Unit: 1641

12. Claims 3 and 4 recite the limitation "the influence". There is insufficient antecedent basis for this limitation in the claims.

13. Claim 5 recites the limitation "the temperature". There is insufficient antecedent basis for this limitation in the claim. In addition, the recitation of "can be" is vague and indefinite because it is unclear if the object holder is indeed cooled down or not.

14. Claim 7 recites the limitation "the discharged liquid". There is insufficient antecedent basis for this limitation in the claim.

15. Claim 8 recites the limitation "the temperature". There is insufficient antecedent basis for this limitation in the claim.

16. Claims 10 and 11 are rejected as vague and indefinite for the recitation of a "second Peltier element" because the claims from which they depend, either directly or indirectly, do not require a first Peltier element. Applicant should consider amending the claim dependency accordingly.

17. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

18. Claim 15 provides for the use of the claimed device, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 15 is further rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a

Art Unit: 1641

process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

20. Claims 1, 3-4, 12, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Andrevski et al. (US Pat. 5,882,903). The reference discloses an assay system comprising a first assembly comprising a reaction chamber and a first fluid exchange channel that provides fluid communication to and from the reaction chamber. The system also comprises a second assembly for temperature control of the reaction chamber (col. 27, lines 35-54). Claim 12 is also anticipated by the reference because it is interpreted as an intended use of the device, which does

Art Unit: 1641

not merit patentable weight. Further, since use claims are not given patentable weight, claim 15 is also anticipated by the reference.

21. Claims 1-7, 12-13, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Freeman (US Pat. 5,958,760). The reference discloses a sample-processing device comprising a support cell made up of a sealed chamber provided with a fluid inlet and outlet for introduction and removal of fluids used in sample processing (col. 2, lines 7-16). Typically, the support cell will be provided with a Peltier device, which may be used to heat or cool the cell to temperatures in the range of 4-100 degrees Celsius (col. 4, lines 13-22). The processing fluids are preferably held in reservoirs, each of which is attached to pump means (col. 4, lines 39-49 and col. 5, lines 3-11). After the processing fluids have been used, the waste is collected in a common waste duct that empties into a glass beaker (col. 10, lines 37-41). The duct of the reference is plastic, which is interpreted as "paraffin-like". Since the device of the reference is preferably used for standard staining and cytochemistry (col. 6, lines 9-21), it is inherent that the target structure of the reference is a tissue section. Claim 12 is also anticipated by the reference because it is interpreted as an intended use of the device, which does not merit patentable weight. Since use claims are not given patentable weight, claim 15 is also anticipated by the reference.

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1641

23. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

24. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (US Pat. 5,958,760) in view of Teppke et al. (US Pat. 5,960,640).

Freeman teaches a sample-processing device, as discussed above. However, the reference does not teach the use of a vessel Peltier element.

Teppke et al. teach a cryostatic microtome comprising a coolable specimen holder and knife holder. One way in which the specimen holder and knife holder can be cooled is through the use of Peltier elements in the specimen holder and knife holder (col. 2, lines 38-45). Capillaries are provided which are connected to the evaporator in the specimen holder (col. 6, lines 43-50).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to use multiple Peltier elements as taught by Teppke et al. with the device of Freeman et al. because both references clearly teach multiple Peltier elements with use of their device that can control temperature. Although Freeman only teaches the use of Peltier elements with support cells, incorporating one with the discharged liquid container simply represents an optimization of assay protocol. If one wished to use the discharged liquid for another purpose or at a later time, one would have been motivated to maintain the liquid at a suitable temperature,

Art Unit: 1641

which can be done with a cooling Peltier element. For example, Teppke et al. uses two Peltier elements because such an arrangement allows for independent temperature control of various components of the device.

Conclusion

Claims 1-13 and 15 are rejected.

References: Schubert, Fuhr et al., and Hancock et al. are cited as art of interest for teaching sample processing devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kartic Padmanabhan whose telephone number is 703-305-0509.

The examiner can normally be reached on M-F (8:30-5:00).

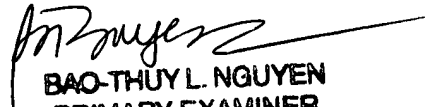
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 703-305-3399. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-5207 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Kartic Padmanabhan
Patent Examiner
Art Unit 1641



March 22, 2002



BAO-THUY L. NGUYEN
PRIMARY EXAMINER
3/24/02